1. Product and company identification

1.1. Product identifier

INTERZINC 12 PART B

Product Code QHA303

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use Refer Technical Data Sheet.

For professional use only.

Application Method Refer Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Importer or Manufacturer

Akzo Nobel India Limited

Plot No. 62P, 62A, 62B, 43E,

Hoskote Industrial Area, Pilgumpa Hoskote Taluk,

Bangalore 562114. India

Telephone No. +91 80 22895000 / + 91 80 71717000

Fax No. +91 80 22895500 / + 91 80 71717500

1.4. Emergency telephone number (24 hour)

For Poisons Advice telephone +91 80 22895000 / + 91 80 71717000 For Advice to Doctors & Hospitals only

2. Hazard identification of the product

2.1. Classification of the substance or mixture

Aquatic Chronic 1;H410 Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Using the Toxicity Data listed in section 11 & 12 the product is labelled as follows.

Warning

H410 Very toxic to aquatic life with long lasting effects.

[Prevention]:

P273 Avoid release to the environment.

[Response]:
P391 Collect spillage.

[Storage]:
[Disposal]:
P501 Dispose of contents / container in accordance with local / national regulations.

2.3. Other hazards
This product contains no PBT/vPvB chemicals.

3. Composition/information on ingredients

This product contains the following substances that present a hazard.

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>zinc powder</td>
<td>&gt;50</td>
<td>Water react. 1;H260; Pyr. Sol. 1;H250; Aquatic Acute 1;H400; Aquatic Chronic 1;H410</td>
<td>[1]</td>
</tr>
<tr>
<td>CAS Number: 0007440-66-6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[1] Substance classified with a health or environmental hazard.

*The full texts of the Hazard (H) phrases are shown in Section 16.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence do not require reporting in this section.

4. First aid measures

4.1. Description of first aid measures

General
In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

Inhalation
Not expected to be acutely toxic by inhalation.
All dusts are irritants, therefore inhalation of dusts should be avoided. Exposures to high dust concentrations may cause irritation to the mucous membrane of the respiratory system and the eyes. Symptoms may include reddening, swelling, itching, weeping, sneezing and coughing. Wash out nose and mouth with water. Remove to fresh air if any effects apparent. Seek medical attention if any effects persist.

Skin Contact
Skin contact may cause irritation.

Wash effected areas with soap and water. Seek medical attention if irritation persists.

Eye Contact
Expected to cause no more than minor eye irritation. Dust in the eyes may cause irritation or corneal injury due to mechanical action. Irrigate copiously with clean fresh water for 10 minutes, holding eyelids apart. Seek medical attention if irritation persists.

Ingestion
Extremely large oral doses may produce gastrointestinal disturbances, both due to the mechanical effects and the possibility of reaction with gastric juices to produce zinc chloride. Pain, stomach cramps and
nausea could occur in aggrevated cases.

Thoroughly rinse mouth with clean water.
If swallowed DO NOT induce vomiting. Give a glass of water to achieve effective dilution. Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed
No data available
4.3. Indication of any immediate medical attention and special treatment needed
No data available

5. Fire-fighting measures

5.1. Extinguishing media
Recommended extinguishing media; alcohol resistant foam, CO. powder.

Do not use; water jet or spray.

Note; Fire will produce dense black smoke. Decomposition products may be hazardous to health. Avoid exposure and use breathing apparatus as appropriate.

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water courses.

5.2. Special hazards arising from the substance or mixture
Fire will produce dense black smoke. Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen. Avoid exposure and use breathing apparatus as appropriate.

5.3. Advice for fire-fighters
Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water courses.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Wear protective equipment as listed in Section 8 during clean up operations.

6.2. Environmental precautions
Do not allow spills to enter drains or watercourses.

6.3. Methods and material for containment and cleaning up
Vacuum spills to keep dust down, do no sweep. Ventilate area.

Do not allow into water courses.

If drains, sewers, streams or lakes are contaminated contact the relevant Environment Protection Agency or local authority.

7. Handling and storage

7.1. Precautions for safe handling
Handling
Handle carefully as the powder is very fine and can spread. Handlers of powders should wash hands and face prior to meals and smoking.

In Storage
Handle containers carefully to prevent damage and spillage. Naked flames and smoking should not be permitted in storage areas. It is recommended that fork lift trucks and electrical equipment are protected to the appropriate standard.

7.2. Conditions for safe storage, including any incompatibilities
Keep away from the following materials: oxidising agents, strong alkalis, strong acids.
Store in a cool dry area, away from heat, sparks and open flame.
Keep containers sealed when not in use.
Store out of direct sunlight.
There are no exposure scenarios, see details in section 1.

7.3. Specific end use(s)
Avoid skin and eye contact. Avoid inhalation of dust. Observe label precautions. Use personal protection equipment as shown in section 8.
Smoking, eating and drinking should be prohibited in all preparation and application areas.

8. Exposure controls and personal protection

8.1. Control parameters
From the listed Exposure Standards for Atmospheric Contaminants (ACGIH) as amended.

<table>
<thead>
<tr>
<th>Material</th>
<th>PEL (Short Term) ppm</th>
<th>PEL (Long Term) ppm</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>zinc powder</td>
<td>-</td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>10</td>
<td>-</td>
</tr>
</tbody>
</table>

(P) Peak exposure limit
(R) Suppliers Recommended Limit
(Sk) There is a risk of absorption through unbroken skin
(Sen) Sensitiser
(Cat1) Category 1 - established human carcinogen
(Cat2) Category 2 - probable human carcinogen
(Cat3) Category 3 - substances suspected of having carcinogenic potential

DNEL/PNEC values
No Data Available

8.2. Exposure controls
Provide adequate ventilation when handling this material. If possible handle in the open.

Eye Protection
Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.

Skin Protection
Wear PVC or rubber gloves.

Other
Overalls should be worn. Barrier creams may help to protect areas which are difficult to cover such as the face and neck. Petroleum jelly based types such as Vaseline should not be used. All parts of the body should be washed after contact.

Respiratory Protection
When concentrations exceed the exposure limits shown above workers must wear appropriate approved
respirators. Provision of other controls such as exhaust ventilation should be considered if practical.

**Thermal hazards**
No Data Available

### 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Grey Powder</td>
</tr>
<tr>
<td>Odour</td>
<td>Smell of Solvent</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not Measured</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting point / freezing point (°C)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Initial boiling point and boiling range (°C)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Flash Point (C)</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate (Ether = 1)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Lower Explosive Limit: No data available</td>
</tr>
<tr>
<td></td>
<td>Upper Explosive Limit: No data available</td>
</tr>
<tr>
<td>Vapour pressure (Pa)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Vapour Density</td>
<td>Heavier than air.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>7.10</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Immiscible</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water (Log Kow)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Viscosity (cSt)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**9.2. Other information**
No further information

### 10. Stability and reactivity

#### 10.1. Reactivity
No data available

#### 10.2. Chemical stability
Stable under recommended storage and handling conditions (see section 7).
Moist zinc dust produces hydrogen which can ignite explosively if concentrations are allowed to build up.
Zinc dust can also react exothermically and ignite spontaneously in air.
Zinc metal, when melted, produces zinc vapour which oxidizes and condenses in air to form zinc fume.

Zinc powder can react violently with water, sulphur and halogens. Keep away from oxidising agents, lower molecular weight chlorinated hydrocarbons, strongly alkaline and strongly acid materials in order to avoid possible exothermic reactions.

#### 10.3. Possibility of hazardous reactions
May react exothermically with: oxidising agents, strong alkalis, strong acids.

#### 10.4. Conditions to avoid
Stable under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials
Keep away from the following materials: oxidising agents, strong alkalis, strong acids.

#### 10.6. Hazardous decomposition products
Fire will produce dense black smoke. Decomposition products may include the following materials: carbon
monoxide, carbon dioxide, smoke, oxides of nitrogen.
Avoid exposure and use breathing apparatus as appropriate.

11. Toxicological information

Acute toxicity

Exposure to solvent vapour concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

The preparation has been assessed using the Acute Toxicity Data listed below, and classified for toxicological hazards accordingly. See section 2 for details.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapour LD50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LD50, mg/L/4hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>zinc powder - (7440-66-6)</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity (mouth)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Acute Toxicity (skin)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Acute Toxicity (inhalation)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Eye damage/irritation</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Sensitization (respiratory)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Sensitization (skin)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Germ toxicity</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Specific target organ systemic toxicity (single exposure)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Specific target organ systemic Toxicity (repeated exposure)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

12. Ecological information

12.1. Toxicity

The preparation has been assessed according to the GHS criteria and is classified as dangerous for the environment, using the toxicity data listed below.

There are no data available on the product itself.
The product should not be allowed to enter drains or water courses.

Aquatic Ecotoxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustacea, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>zinc powder - (7440-66-6)</td>
<td>0.182, Oncorhynchus tshawytscha</td>
<td>0.068, Daphnia magna</td>
<td>0.106 (72 hr), Pseudokirchneriella subcapitata</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
There is no data available on the preparation itself.

12.3. Bioaccumulative potential
Not Measured

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment
This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects
No data available

13. Disposal considerations

13.1. Waste treatment methods
Vacuum spills to keep dust down, do not sweep.
Do not allow into drains or watercourses.
As waste regulations vary, use information provided in this data sheet to obtain advice from the local Waste Regulation Authority.

14. Transport information

14.1. UN number
UN1436

14.2. UN proper shipping name
Zinc Dust

14.3. Transport hazard class(es)
Road and Rail Transport: Zinc Dust (Not Hazardous by Testing in Accordance with UN Manual of Tests and Criteria)

IMDG reference:

<table>
<thead>
<tr>
<th>Class/Div</th>
<th>Sub Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Ems:
F-G, S-O

ICAO/IATA

<table>
<thead>
<tr>
<th>Class</th>
<th>Sub Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3</td>
<td>4.2</td>
</tr>
</tbody>
</table>

14.4. Packing group
II

14.5. Environmental hazards
Road and Rail
Environmentally Hazardous: Yes
IMDG reference: Marine Pollutant: Yes (Zinc Powder)

14.6. Special precautions for user
No further information

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not Applicable

15. Regulatory information

This product and all its components complies with the chemical and transport regulations from the country listed in section 1.3.

Other regulatory information specific to the hazardous chemical(s):

None noted.

16. Other information

The information on this SDS is based upon the present state of our knowledge and on current laws.
The product should not be used for purposes other than shown in the product data sheet without first obtaining written advice.
It is always the responsibility of the user to take all necessary steps to meet the demands of applicable legislation.

The full text of the phrases appearing in section 3 is:

H250 Catches fire spontaneously if exposed to air.
H260 In contact with water releases flammable gases which may ignite spontaneously.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

This SDS is valid for 5 years from the revised date on page 1.
The revision date is in American format (e.g. MM/DD/YY).

End of document

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Akzo Nobel however makes no warranty as to the accuracy of and/or sufficiency of such information.